

**REMARKS**

In response to the Examiner's Action mailed on November 1, 2005, claims 1 to 27 are amended. The applicants hereby respectfully request that the patent application be reconsidered.

An item-by-item response to Examiner's objections or rejections is provided in the followings:

**1. *Objection to Drawings***

The Examiner objects to drawings as failing to show feature of the claims of backplane and two current sources.

In response to the objections, the claims are amended to remove these terms from the claims.

**2. *Objection to claims***

The Examiner objects to Claims 5, 13, 14, and 27 because these claims present different informalities.

In response to the objections, claims 5, 13, 14, and 27 are amended and the informalities are corrected.

**3. *Rejections of claims under 35 USC 112***

The Examiner rejects claims 10-11, 13-16 and 27 for not particularly pointing out and distinctly claiming the subject matter which the applicant regards as the invention.

In response to the rejection, claims 10-11, 13-16 and 27 are amended. The ambiguous terms and terms lacking antecedent basis are corrected. The Applicant therefore respectfully requests that the rejection based on 35 USC 112 be withdrawn and the amended claims be allowed.

### 3. *Rejections of Claims under 35 USC§102*

The Examiner rejects Claims 1, 4-6, and 23-26 under 35 U.S.C. 102(b) as being anticipated by Ogino (4,923,286).

In response to the rejections, claim 1 to 27 are amended. The amended claim 1 direct to a display system that includes

- a) a temperature sensing circuit comprising a current source connected to a temperature sensing diode for providing an input to a voltage controlled oscillator (VCO) for generating a frequency output corresponding to said input voltage as a function of a temperature measurement by said temperature sensing diode; and
- b) a calibrating adjustable voltage connected to said VCO for inputting different controllable voltages to said VCO for accurately calibrating said temperature sensing circuit according to a proportion to absolute temperature (PTAT) correlation between said frequency generated by said VCO and an absolute temperature in degrees of Kelvin in generating said input voltage by said temperature sensing diode .

The amended claims 1 to 27 are directed to a temperature sensing system that includes calibrating adjustable voltage connected through a multiplexer to the VCO as clearly shown in Fig. 2. The calibration process is based on a "proportional to Absolute Temperature (PTAT) correlation" as specifically disclosed in the Specification. Since none of the cited prior art reference disclose this inventive feature as now included in the amended claims 1 to 27, the amended claims are now new and totally out of the scopes from that disclosed by Ogino.

### 4. *Rejections of Claims under 35 USC§103*

The Examiner rejects Claims 2 and 9, as being obvious over Ogino in view of Matsuyama, claims 3, 17, 18 and 20-22 as being obvious over Ogino in view of Krusius, Claims 7 and 8 as being obvious under Ogino in view of Nakamura, claims 10-11 as being obvious under Ogino in view of Brown et al., and claims 12 and 15 as being obvious under Ogino in view of Lippman et al.

In response to the rejections, claims 1 to 27 are amended. As discussed above the amended claims according to the independent claims 1, 4, 17, and 23 include a special inventive feature of:

connecting a calibrating adjustable voltage to said VCO for inputting different controllable voltages to said VCO for accurately calibrating said temperature sensing circuit according to a proportion to absolute temperature (PTAT) correlation between said frequency generated by said VCO and an absolute temperature in degrees of Kelvin in generating said input voltage by said temperature sensing circuit. (claim 23).

The calibration circuit and configuration are not disclosed in any of the prior art systems. Therefore, the amended claims including all the independent claims as discussed above and the dependent claims are new and not obvious. The Applicant hereby respectfully requests that the rejections based on the cited prior art be withdrawn and the amended claims be allowed.

With the amended drawings claims and the reasons provided above, the applicant hereby respectfully requests that Examiner's rejections under 35 USC §112, 35 USC § 102 and 35 USC § 103 be withdrawn and the present application be allowed.

Respectfully submitted,

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By



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